BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Estimate Cost Rs. 25.00 lakhs

Name of Work: Developmental works for providing Drinking water facility in Thanisandra ward no. 06.

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump, MWS of P.W.S.S by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Gerophysical investigation of existing Ground Wate in the vicinity, its qualityf 1.0 meter in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site., engaging techinical personal and labour required etc., as per Specification and direction **(P.30, I. 9.4) PRED.SR 2008-09**	Each BW							
			4				**4**	1938.46	**7754.00**
2	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) **P. 29/I.1 PRED SR 2008-09**	Rmtr							
	0 to 50 m		4	50.00			**200.00**	315.18	**63036.00**
	50 to 100 m		4	50.00			**200.00**	412.00	**82400.00**
	100 to 150 m		4	50.00			**200.00**	458.35	**91670.00**
	150 to 200 m		4	50.00			**200.00**	484.10	**96820.00**
	200 to 250 m		4	50.00			**200.00**	560.32	**112064.00**
	250 to 300 m		4	50.00			**200.00**	600.49	**120098.00**

	Supply of ISI mark 175 mm nominal bore medium black ERW casing pipe of 5 mm thick black electric resistance continuous welded mild steel tube material confirming to IS 1387 / 1993 & manufactured from hot rolled steel skelp / stripes in random length of 4 to 7 mts both ends threaded confirming to IS 554 / 1985, one end fixed with a socket and the other and with a plastic protection end (including of all taxes) as per corragandam SE PRED No. 2/2012-13	Rmtr							
			2	45.00			90.00		
			2	35.00			70.00		
							160.00	1325.00	212000.00
4	Providing 250mm dia PVC Pipe 6kg/cm as per specification and direction of the Engineer in Charge of the work	Rmtr							
			4	20.00			80.00		
							80.00	1133.00	90640.00
5	Providing and fixing 175mm Borewell Cap PRED SR 2012-13 Page Nio SL.No	No.	4				4	100.00	400.00
6	Providing and fixing of clampset and borewell cap to the pump.	No.	4				4	450.00	1800.00
7	Providing and 175mm dia MS Coler etc as per specification and direction engineer in charge of the work.	NO,S	15X4				60	150.00	9000.00
8	Supply and delivery at site brand New texmo/ innoval/ Lubi/ Sabar / Atalanta/ Calamal/ make suitable for vertical installation in 150mm dia bore well comprising of single stage or multistage CF pump close coupled by measns of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for opertation of 3PH., 50 Hz, 380/440 volts AC supply fitted with required aqccessories such as suction, casing suction strainers sand guard Non return value etc. complete . The pump and motor shall form an integral unit with all the required fittings 15.00 HP 30	No							
	12.5 HP 20 Stage		4				4	70600.00	282400.00

	Supplying of ISI marked galvanized mild steel tube (continously welded electric resistance welded (ERW) high frequency, induction welded (HFIW) Hot finished welded type of nominal bore given below screwed at both ends as per IS 554/1986 with latest amendments, pipes threaftes at one end and the other end protected asper specification in random lengths of 4 to 7 mtrs Confirming to IS 1239 part I/1990 with amendament 1-5 and with all its latest amendements if any. The pipes supplied should be with BIS mark No 3/08-09 2406/15.10.2008. 50 mm dia including Collar Heavy Class 2015-16, P-90, i no13 15	Rmtr							
			4	275.00			1100.00	431.00	474100.00
10	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper conductor confirming to table 3 class 5 of IS:8130-1984 and virgin grade PVC insulation and sheathed suitable for working voltage upto 1100 Volts. P. No. 46/ I No. 30-B 4.0 Sqm mm of 36 strands 0.3mm dia Group - A KPWD Electrical SR 2007-08 3/2008-09 4538/19.01.2009 (1x3x6.00 Sqmm PVC cable)	Mtr							
			2*4	290.00			2320.00		
							2320.00	188.70	437784.00
11	Heavyduty coller 50mm dia	Nos	4X46				184.00	150.00	27600.00
12	Erection of pumpset including aligning and balancing with all necessary erection materials and labour including supply and erection of one pair supporting clamps, one borewell cap. Cable clips with bolts, nuts, valves guages etc., involoved in the job (Necessary GI pipe and specials with be supplied by the board at the site free of cost) (As per rate approved KUWS & DB for year 2008-09	No							
			4				4	3000.00	12000.00
13	Supplying and fixing 20"x20"x2.5" polished wood board made of not less than 15mm thick plank on both sides with planks made out of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws etc., P No. 51/ I No.6.66 /f KPWD Electrical SR 2014-2015	No.							
			4				4	302.00	1208.00

	upplying of LTUG cable having aluminium condutor PVC insulated shethed, galvnised steel, wire / steel tap armoured cable with PVC outer sheathing 1.1 KV class. 4 core 16 Sqmm(confirming to IS 1554)P.NO(-553,s.no-10(d)bwssb sr(13-14)	Mtr							
			4	30.00			120.00	140.04	16805.00
15	Labour charges for laying of 1.1 K.V class UG cable (PWD Electrical SR-1999-2000, P-68 /I.No.7.8.1a) KPWD Electrical SR 2014-2015	Mtr							
			4	300.00			1200.00	10.80	12960.00
16	Digging or trenching of 0.6 m x 0.5 m wide refilling the trench to the required ground level and consolidating etc., complete as per Civil SR KSRB 1-2 P-7 P No. 68/ I. No. 7.93 KPWD Electrical SR 2014-2015	Mtr							
	For Cutting Road Surface		4	25.00			100.00	85.00	8500.00
17	Supplying and fixing of Class A (meaium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV class P. No. 69/ I No.15-A KPWD Electrical SR 2014-2015	Mtr							
	40mm dia GI pipe		4	4.00			16.00	345.00	5520.00
18	Supplying and fixing L.T. cast Iron pot head suitable for 1.1 KV class UG cable filled with necessary bituumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc., P. No. 69/ I No. 7.132 KPWD Electrical SR 2014-2015	No.							
			4				4.00	280.00	1120.00
19	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C cutouts and other equipments on the meter board using 40 mm dia 2.90 mm thick GI pipe 2.5 m long buried in a pit. The pit should be filled with equal propotion of solt and charocoal 150 mm alround the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size, as per ISI specification 7.3.3 IS 732 using 12 mm dia bolts, nuts, washers and check nuts, etc., the pipe shall have 16 throught holes of 122 mm dia, (PWD Electrical SR-1999-2000, P-62, I.No.7) KPWD Electrical SR 2014-2015	No							
			4				4	2727.00	10908.00

	Supplying and fixing of Porcelain fuse channel with cut out on existing wooden / panel using necessary nuts, bolts and washer etc., complete.... P No. 52/I No 6.73 KPWD Electrical SR 2014-2015	No.							
	63 Amps		6x4				24	234.00	5616.00
21	Providing and fixing in position 50mm nominal bore gun metal non-return valve horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No. KBS 13-7.1-4 P.No. 9/I No. 13.55 PWD SR 2015-2016	No							
	Basic Rate	1490.00	4				4	1579.40	6317.60
	Area weightage	89.40							
	TOTAL	1579.40							
22	Providing NP/CP waste unions conforming to ISI specifications and fixing them in position as per directions including cost of materials, fixtures and conveyance to work spot etc., complete. P. No. 95/ I. No. 13.81.3 PWD SR 2015-2016	No							
	50mm dia		4				4	227.90	911.60
	Basic Rate	215.00							
	Area weightage	12.90							
	TOTAL	227.90							
23	Supplying and fixing 50mm dia GI X nipple with ISI mark with all lead and lift loading unloading and labour charges etc coomplete(p.noxxxv11 pwd sr-2015-2016)	No							
			4X2				8	104.30	834.40
24	Supplying shunt trip capaitors conforming to IS 2834, 3phase 400/440 volts grade for power factor improvement of rotating machinery, Capacitor in KVAR rating Nos. 2KVAR capacity with all lead and lift =, loading, unloading and labour charges etc complete as per specifications(p.no54 S.NO6.13 KPWD SR 2013-2014)	No							
			4				4	1486.00	5944.00

	upplying and fixing miniature circuit breakers/solaters on existing MCB distribution boards using necessary fixing materiasl wiring complete as requireds 5 to 30 amps triple pole with all lead and lift, loading, unloading and labour charges etc complete as per specifications GROUP A (P.NO6.15.9/P.NO-54 ELE SR2014-2015)	No							
			4				4	1547.00	6188.00
26	Fabrication supplying and mounting MS box of 16 SWG suitable for floor /wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished 2 coats of red oxide primer paint and finally finished with approved colour enamelled metal paint etc., complete box of 21600 sqcm @ Rs.0.35 P.No. 57 I. No.6.41 .20 KPWD Electrical SR 2014-2015	Sq.Cm							
			4x2	120.00	60.00		57600.00		
			4	360.00	25.00		36000.00		
							93600.00	0.34	31815.00
	Basic Rate	0.33							
	Add Area Weightage @ 3%	0.01							
	Total	0.34							
27	Supplying and delivery at site brand new star / Essen/ Lotus/Sun-shines/Adarsh/ GK Controls best indigenous make combined energy meter - cum- control panel board unit of size 600x450 x200 mm minimum mechanically strong vermin and water proof. The unit shall have two detachable doors suitable for operation on 3 ph, 50Hz, 380/440 volts, A.C supply with spring loaded latch, locking device with a key ribs should be provided inside the door, canopy apron and louvers ventilators shall be provided. the combined energy meter cum- control panel board unit suitable for operation. The panel board shall be fabricated on single unit in the above components for suitable pumpset. 15HP to 30 HP Star Delta Starter SERDED Rate	No.							
			4				4	11000.00	44000.00

	SRB 2-2.2 : Earth work excavation for oundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5m , in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m. specification, specification. No. KBS 2.1(b) / 2.3.5, No. 5/ Item No. 2.4/ PWD SR 2015-16	Cum							
			1	40.00	0.50	0.80	16.00	283.02	4528.00
	Basic Rate	267.00							
	Area Weightage @ 6%	16.02							
	Total	283.02							
29	Providing and instalation at site of works P.V.C.Pipes including cost of pipes and specials and incluidng lowring into trenches, laying true to line, level and perfect linking at joints, leak proof including jointing encasing the pipe alround to a depth Not less than 15cm with grave or selected earth avalabile from the execavation Etc., Page No.3 item No.4.2 PRE SR2008-09.	Rmtr							
	75mm Dia 6 KSC		1	40.00			40.00	161.71	6468.00
	Basic Rate	157.00							
	Area weightage	4.71							
	TOTAL	161.71							
30	KSRB 2-4 : Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50mm, and lift upto 1.5m, including cost of all labour complete as per specifications, No. 6/ Item No. 2.11/ PWD SR 2015-16	Cum							
			Qty. Vide Item No. 28				16.00	76.32	1221.00
	Basic Rate	72.00							
	Area Weightage @ 6%	4.32							
	Total	76.32							
31	KSRB 13.6.3-6 : Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) 50mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No. KBS 13.2.6/13.3 (P.89/I.13.37 PWD SR - 2015-16)	Each							
			10				10	2120.00	21200.00
	Basic Rate	2000.00							
	Area Weightage @ 6%	120.00							
	Total	2120.00						**Total**	**2313630.44**
									185090.44
32	KRIDL 8% charges								

	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
33	KSRB 2-4: Refilling available earth around pipe lines,cables in layers not exceeding 20cms in depth,compacting each deposited layer by ramming after watering with lead upto 50m.and lift upto 1.5m including cost of all labour complere as per specifications allow 60%of rate considered under item KSRB 2.3(P.6/2.11) Qty vide item no:26 (PWD P:7/2.11 sR 2010-11	Cum					**324.00**	76.32	**24728**
	BR Rate = 72 + 8% = 76.32								
34	Providing and fixing 50mm dia Gun Metal Wheel valve conforming to IS, Specification of approved make as per directions including all lead and lift etc.,complete 50mm PRED	Nos					**24.00**	1605.00	**38520**
									2287318
34	KRIDL Charges 8%								**182985**
35	Third party inspection								**22873**
35	Miscellaneous charges and other contigencies								**6823**
								Total	**2500000**

CERTIFICATE:-

1 The above estimate has been prepared as per CSR PWD Bangalore circle 2015-16, SR PRED approved Rates No 3/08-09 dt: 19/01/09 and electrical SR 2007-08

2 Certify that the work spot has been inspected by me & prepared the estimate in most economical way of executing the

3 This work is not slipt up

4 The work spot comes under BBMP limits

5 The estimate prepared with essential provision

Asst. Engineer,
Ward No. 6

Asst. Executive Engineer
BBMP, Byatrayanapura Sub-Division

Executive Engineer
BBMP, Byatrayanapura Division 18/3/16.

Administrative Approval
Accorded For 25.00 lakh Rs
Head of A/C..... P3110
CER NO :.....147A Dt:..18.3.16

TA CE (YNK)

Technical Sanction
Accorded For 25.00 lakh Rs.
Head of A/C..... P3110
CER NO :.....138 (138) Dt:..18.3.16

TA CE (YNK)